



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,878	09/29/2006	Fritz Feldmeier	FELDMEIER-2 PCT	5635
25889 7590 11/26/2008				
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576				
EXAMINER				
LIGERAKIS, JOHN				
ART UNIT		PAPER NUMBER		
3655				
MAIL DATE		DELIVERY MODE		
11/26/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/594,878

Applicant(s)

FELDMEIER, FRITZ

Examiner

John V. Ligerakis

Art Unit

3655

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 29 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date 9/29/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) on September 29, 2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed.

A copy of foreign patent document, JP 06-017851 A, was not provided. A copy of JP 2006-017851 A was provided, but this does not coincide with the foreign patent document in the IDS. However, the examiner has located JP 06-017851 A which is now cited on the attached form PTO-892.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4, it is unclear which shaft has a clutch ring without reliance on reference numerals. Also, in claim 1, line 6, is unclear as to which shaft the sprags are installed on without reliance on reference numerals.

Further, in claim 1, line 3, the phrase "especially" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 5, which recites the movable sliding sleeve (15) shown in Fig. 3, cannot properly depend from claim 1, since the second shaft does not have both a clutch ring and a moveable sliding sleeve.

Claim 7, which recites the moveable sliding sleeve (18) shown in Fig. 5, cannot properly depend from claim 1, since the sprags (3, 3') are not installed on the first shaft. Further, claim 7 is not at all clear on which inner side has an inner cone. No inner cone is shown on the inner side of the sliding sleeve. The inner cone is believed to be on the inner surface of the drive component (20).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Lund (US Patent 3,119,479).

Regarding claim 1, Lund discloses a clutch device (See Figs. 1, 2) for the couplable connection two rotatably mounted machine parts: a first shaft (15) and a second shaft (11). The second shaft (11) has a clutch ring (See Fig. 1, right side of 11), which on the inside has sprags (13, 14), acting against each other in pairs respectively, which are installed on the first shaft (15) in an encircling manner.

Regarding Claim 2, Lund discloses the clutch device as set forth above, wherein the sprags (13, 14) are accommodated in recesses of a cage (34).

Regarding claims 3 and 4, Lund discloses the clutch device as set forth above, wherein the sprags (13, 14) are accommodated in a helical spring ring (28).

Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Mann (US Patent 3,078,974).

Regarding claim 1, Mann discloses a clutch device (See Figs. 1, 2) for the couplable connection of two rotatably mounted machine parts: a first shaft (2) and a second shaft (1). The second shaft (See Fig. 1, left side of 1) has a clutch ring (1), which on the inside has sprags (6, 7), acting against each other in pairs respectively, which are installed on the first shaft (2) in an encircling manner.

Regarding Claim 2, Mann discloses the clutch device as set forth above, wherein the sprags (6,7) are accommodated in recesses (See Fig. 2, right side of 5) of a cage (5).

Regarding claim 5, Mann discloses the clutch device as set forth above, wherein an axially movable sliding sleeve (5), for the axial displacement of the sprags (6, 7), is provided on the first shaft (2).

Regarding claim 6, Mann discloses the clutch device as set forth above, wherein an axially movable sliding sleeve (5), with sprags (6, 7) attached on the outer (upper portion of 5) and inner side (lower portion of 5), is provided on the first shaft (2).

Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakao (JP 06017851 A).

Regarding claim 1, Nakao discloses a clutch device (See Figs. 1, 2) for the couplable connection of two rotatably mounted machine parts: a first shaft (2) and a second shaft (3). The second shaft (3) has a clutch ring (7), which on the inside has sprags (4), acting against each other in pairs respectively, which are installed on the first shaft (2) in an encircling manner.

Regarding Claim 2, Nakao discloses the clutch device as set forth above, wherein the sprags (4) are accommodated in recesses (15) of a cage (5).

Regarding claim 5, Nakao discloses the clutch device as set forth above, wherein an axially movable sliding sleeve (5), for the axial displacement of the sprags (4), is provided on the first shaft (2).

Regarding claim 6, Nakao discloses the clutch device as set forth above, wherein an axially movable sliding sleeve (5), with sprags (4) attached on the outer (See Fig. 1, right side) and inner side (left side), is provided on the first shaft (2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over
Griswold (US Patent 1,955,879) in view of Nakao (JP 06017851 A).**

Griswold discloses a clutch device (See Fig. 1) for the couplable connection of two rotatably mounted machine parts: a first shaft (15) and a second shaft (10). The second shaft (10) has a clutch ring (48), which on the inside has rollers (47) which are installed on the first shaft (15) in an encircling manner. The clutch ring is a movable sliding sleeve (48) which has a double cone (37, 38) on the outer side. The first shaft (15) has an inner cone (39) on the inner side. Griswold fails to disclose sprags acting against each other in pairs. Nakao discloses a clutch device having sprags acting against each other in pairs. It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the rollers disclosed by Griswold with the sprags disclosed by Nakao to improve performance.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fukui et al. (US Patent 5,109,964) shows a conical roller type clutch apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Ligerakis whose telephone number is (571) 270-3278. The examiner can normally be reached on M-Th 8am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571)272-7095. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9179 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call (800) 786-9199 (IN USA OR CANADA) or (571) 272-1000

/John V Ligerakis/
Examiner, Art Unit 3655

/Richard M. Lorence/
Primary Examiner, Art Unit 3655